

Notice of Allowability

Application No.

10/786,850

Examiner

William W. Moore

Applicant(s)

SVENDSEN ET AL.

Art Unit

1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 13 February 2007 and the interview conducted 16 May 2007.
2. ☒ The allowed claim(s) is/are 59-74 and 77-97.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Art Unit: 1656

EXAMINERS AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Amend claims 59 and 79 thus:

Claim 59 (Amended). A variant TY145 like subtilase comprising three calcium ion binding sites prior to alteration, an alteration at a position corresponding to position 171 in the amino acid sequence of SEQ ID NO:1, and at least one other ~~an~~ alteration at one or more positions corresponding to positions in the amino acid sequence of SEQ ID NO:1 selected from the group consisting of:

1, 2, 3, 5, 6, 7, 16, 17, 18, 20, 21, 22, 23, 31, 35, 36, 38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 73, 79, 80, 81, 84, 85, 87, 88, 89, 90, 91, 92, 106, 107, 108, 109, 110, 112, 113, 114, 115, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 130, 131, 139, 141, 142, 145, 146, 147, 149, 150, 151, 153, 154, 155, 156, 157, 158, 159, 160, 161, 164, 165, 166, 167, 168, 169, 170, 172, 174, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 193, 198, 199, 200, 201, 202, 204, 207, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 239, 240, 241, 242, 243, 247, 249, 250, 252, 254, 265, 268, 269, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 304, 305, 306 and 307;

wherein the variant TY145 like subtilase has protease activity and has an amino acid sequence which is at least 90% homologous to SEQ ID NO:1 ~~and each position corresponds to a position of the amino acid sequence shown in SEQ ID NO:1.~~

Claim 79 (Previously presented) A variant TY145 like subtilase comprising three calcium ion binding sites prior to alteration and
an alteration at a position corresponding to position 171 in the amino acid sequence of SEQ ID NO:1;
an alteration at a position corresponding to position 116 in the amino acid sequence of SEQ ID NO:1 comprising D116H,K,R; and
an alteration at one or more positions corresponding to positions in the amino acid sequence of SEQ ID NO:1 selected from the group consisting of:

Art Unit: 1656

1, 2, 3, 4, 5, 6, 7, 16, 17, 18, 19, 20, 21, 22, 23, 31, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 79, 80, 81, 84, 85, 86, 87, 88, 89, 90, 91, 92, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 164, 165, 166, 167, 168, 169, 170, ~~171~~, 172, 174, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 193, 198, 199, 200, 201, 202, 204, 207, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 239, 240, 241, 242, 243, 247, 248, 249, 250, 251, 252, 254, 265, 266, 268, 269, 270, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306 and 307; and

~~an alteration comprising D116H, K, R,~~

wherein the variant TY145 like subtilase has protease activity and has an amino acid sequence which is at least 90% homologous to SEQ ID NO: 1 ~~and each position corresponds to a position of the amino acid sequence shown in SEQ ID NO: 1.~~

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael W. Krenicky on 22 May 2007.

The following is an examiner's statement of reasons for allowance:

The examiner's amendment provides a structural definition of a "TY145 like" subtilase in the independent claims 59 and 79, by requiring a specific feature, possession of three calcium ion sites, disclosed in the specification to differentiate the class of subtilases Applicant intends to modify from the subtilisin like subtilases. This structural feature is recited "prior to alteration" because the greater number of amino acid sequence positions identified by correspondence with the amino acid sequence of SEQ ID NO:1 herein are associated with calcium ion binding sites common to, and identifiable in, the amino acid sequences of SEQ IDs NOs:1-4 herein. The requirements for amino acid sequence alterations at specific positions in both claims 69 and 79 avoids the obviousness type double patenting rejection of claims herein over Outtrup et al., of record, thus claims 59-74 and 77-79 are allowed herewith.


Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1656

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William W. Moore whose telephone number is 571.272.0933 and whose FAX number is 571.273.0933. The examiner can normally be reached Monday through Friday between 9:00AM and 5:30PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisory Primary Examiner, Dr. Kathleen Kerr Bragdon, can be reached at 571.272.0931. The official FAX number for all communications for the organization where this application or proceeding is assigned is 571.273.8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571.272.1600.

/Nashaat T. Nashed/
Primary Examiner
Art Unit 1656


William W. Moore
22 May 2007